

BASIS FOR THE AMENDMENT

Claims 4-6 have been canceled. The Claims have been amended as supported by Claims as originally filed. The amendment of Claim 1 is supported by Claims 5 and 6 as originally filed.

No new matter is believed to have been added by entry of this amendment. Entry and favorable reconsideration are respectfully requested.

Upon entry of this amendment Claims 1-3, 7-22 will now be active in this application.

REMARKS

Applicants respectfully request reconsideration of the application, as amended, in view of the following remarks.

The rejections of Claims 17, 18 and 20 under 35 U.S.C. § 101 and 112, 1st paragraph, are obviated by the amendments of the Claims.

The rejection of Claims 1, 2, 4, 5, 7-14, 16-18, 21 and 22 under 35 U.S.C. § 102(b) as anticipated by Kummer, the rejection of Claims 1, 2, 9, 10 and 19 under 35 U.S.C. § 102(b) as anticipated by Tanaka, the rejection of Claims 3 and 15 under 35 U.S.C. § 103(a) over Kummer in view of Knovel, the rejection of Claims 5, 19 and 20 under 35 U.S.C. § 103(a) over Kummer in view of Roper and the rejection of Claim 6 under 35 U.S.C. § 103(a) over Kummer in view of Roper and Tanaka are respectfully traversed.

The present invention as set forth in **amended Claim 1** relates to a polyalkene amine formulation, comprising:

at least one polyalkene amine in a solvent,

wherein the formulation has at least one of the following low temperature properties:

- a) a cloud point less than or equal to -28°C determined according to DIN ISO 3015 or DIN EN 23015;
- b) a pour point less than or equal to -27°C determined according to DIN ISO 3016; and/or
- c) no crystalline precipitates after storage at a temperature in the region of about -35°C;

wherein the solvent is selected from mixtures of:

S1) at least one n- or iso-C₁₀-C₁₄ paraffin,

S2) at least one C₁₀-C₁₄ naphthene; and

wherein S1 and S2 are present in a mixing ratio of from 10:90 to 90:10.

Claims 2, 3, 7-14, 16-19, 21-22 depend directly or indirectly on Claim 1. Claims 15 and 20 include solvent mixtures as in Claim 1.

Kummer, Tanaka, Knovel, Roper, disclose or suggest, alone or in combination, formulation as claimed **wherein the solvent is selected from mixtures of:**

S1) at least one n- or iso-C₁₀-C₁₄ paraffin,

S2) at least one C₁₀-C₁₄ naphthene; and

wherein S1 and S2 are present in a mixing ratio of from 10:90 to 90:10.

While Kummer refers to the preparation of polybutyl- or polyisobutyl amines (see formula I in claim 1 of Kummer) and suggests in column 4, lines 26 to 39 that it might be advantageous to use in the preparation process a suitable inert solvent, Kummer neither discloses the specific solvent as claimed nor suggests that by applying a formulation as claimed, the low temperature performance as illustrated in the experimental part of the present application (see for example tables A, B and C at pages 19-21 of the specification as originally filed) can be improved significantly. Most notably, the cloud point, pour point and the storage stability could be improved significantly using the solvents of the present invention in the claimed formulation.

Tanaka discloses a method for lubricating a 2-stroke motorcycle engine by applying a base oil lubricant comprising a mineral oil derived from a naphthenic crude source of specific

viscosity and a pour point below -30 °C and may further comprise an ashless oil-soluble amine, for example a polyisobutene amine as further constituent. However, as it is the case for Kummer, Tanaka neither discloses nor suggests using a formulation having the solvent mixture of as claimed in Claim 1 of the present invention.

Moreover, Tanaka does not disclose or suggest that by applying said specific solvent mixture the low temperature performance of a polyalkene amine as illustrated by the experimental part of the present specification can be significantly improved. As discussed above, and as shown by the Examples of the present invention, the cloud point, pour point and the storage stability could be improved significantly using the solvents of the present invention in the claimed formulation.

Roper discloses the preparation of fuel or lubricant compositions having a combination of polyisobutene amines and a secondary polyisobutene amine (see formula I in claim 1 of Roper). While Roper makes reference to the use of inert solvents in column 3, lines 42-45, said paragraph suggests the use of said inert solvent for improving the handling of polyolefins in a reaction for preparing said polyolefine amine additives. It is nowhere disclosed or suggested that specific solvent mixtures as defined in Claim 1 of the present invention may be applied and that said mixtures might positively affect the low temperature performance of a polyalkene amine additive formulation.

Knovel also fails to disclose or suggest the use the of the solvent mixtures claimed in Claim 1 of the present invention and thus, this reference does not cure the defects of Kummer.

Therefore, the rejection of Claims 1, 2, 4, 5, 7-14, 16-18, 21 and 22 under 35 U.S.C. § 102(b) as anticipated by Kummer, the rejection of Claims 1, 2, 9, 10 and 19 under 35 U.S.C. § 102(b) as anticipated by Tanaka, the rejection of Claims 3 and 15 under 35 U.S.C. § 103(a) over Kummer in view of Knovel, the rejection of Claims 5, 19 and 20 under 35 U.S.C. § 103(a) over Kummer in view of Roper and the rejection of Claim 6 under 35 U.S.C. § 103(a) over Kummer in view of Roper and Tanaka are believed to be unsustainable as the present invention is neither anticipated nor obvious and withdrawal of these rejections is respectfully requested.

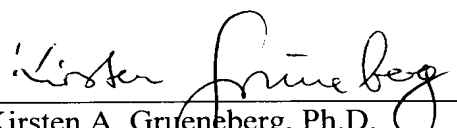
This application presents allowable subject matter, and the Examiner is kindly requested to pass it to issue. Should the Examiner have any questions regarding the claims or otherwise wish to discuss this case, he is kindly invited to contact Applicants' below-signed representative, who would be happy to provide any assistance deemed necessary in speeding this application to allowance.

Respectfully submitted,

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